Franchise Tax Board ANALYSIS OF ORIGINAL BILL									
Author:	Caballero & Ruskin	Analyst:	Jahna Alvarado	Bill Numb	per: AB 765				
Related Bi	See Legislative Ils: History	Telephone:	845-5683	Introduced Date:	February 26, 2009				
		Attorney:	Patrick Kusiak	Sponsor:					
SUBJECT: Research Expenses Credit/Increase Beginning On Or After January 1, 2011									
SUMMARY									
This bill would increase the percentage of qualified research expenses, as defined, included in the Research and Development (R&D) credit.									
PURPOSE OF THE BILL									
According to the author's office, the purpose of this bill is to encourage an increase in R&D activity in California that will lead to the creation of new jobs in the state.									
EFFECTIVE/OPERATIVE DATE									
As a tax levy, this bill would be effective immediately upon enactment and specifically operative for taxable years beginning on and after January 1, 2011.									
POSITION									

Pending.

## **SUMMARY OF SUGGESTED AMENDMENTS**

Amendments are needed to resolve the implementation concerns discussed in this analysis. See "Implementation Considerations." Department staff is available to assist the author with these amendments. In addition, amendments are provided to resolve technical concerns identified by department staff. See "Technical Considerations" below.

#### **ANALYSIS**

# FEDERAL/STATE LAW

Existing federal law allows taxpayers a research credit that is combined with several other credits to form the general business credit. The research credit is designed to encourage companies to increase their research and development activities.

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Generally, the R&D credit for personal income tax (PIT) taxpayers is the sum of two components:

- 1. 20 percent of the qualified research expenses incurred during the taxable year that exceeds the base amount, as defined, and
- 2. 20 percent of the amount paid or incurred by the taxpayer in carrying on any trade or business of the taxpayer during the taxable year to an energy research consortium.

The corporate R&D credit includes a third component that is equal to 20 percent of the excess of cash payments made to universities and certain nonprofit scientific research organizations during the year over the base period amount (the basic research payments).

Under federal law, a taxpayer may elect the Alternative Simplified Credit (ASC) method to determine the qualified research expense component of the R&D credit.

Prior to January 1, 2009, federal law allowed a taxpayer to elect the Alternative Incremental Credit (AIC) method to determine the qualified research expense component of their R&D credit.

To qualify for the credit, research expenses must qualify as an expense or be subject to amortization, be conducted in the U.S., and be paid by the taxpayer. The research must be experimental or laboratory research and pass a three-part test as follows:

- 1. Research must be undertaken to discover information that is technological in nature. The research must rely on the principles of physical, biological, engineering, or computer sciences.
- 2. Substantially all of the research activities must involve experimentation relating to quality or to a new or improved function or performance.
- 3. The application of the research must be intended for developing a new business component. This is a product, process, technique, formula, or invention to be sold, leased or licensed, or used by the taxpayer in a trade or business.

Ineligible expenses include seasonal design factors; efficiency surveys; management studies; market research; routine data control; routine quality control testing or inspection; expenses incurred after production; development of any plant, process, machinery, or technique for the commercial production of a business component unless the process is technologically new or improved. The federal credit does not apply to any expenses paid or incurred after December 31, 2009.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Emergency Economic Stabilization Act of 2008 (Public Law 110-343).

California conforms to the federal credit with the following modifications:

- The state credit is not combined with other business credits.
- Research must be conducted in California.
- The credit percentage for qualified research in California is 15 percent versus the 20 percent federal credit.
- The credit percentage for basic research in California is limited to corporations and is 24 percent versus the 20 percent federal credit percentage.
- The percentages for the alternative incremental research portion of the credit vary from the federal credit.

The California research credit is allowed for taxable years beginning on or after January 1, 1987, and is permanent.

Total business credits are limited to 50 percent of a specified amount for taxable years beginning on or after January 1, 2008, and before January 1, 2010, for taxpayers with net "business income" (PITL) and income subject to tax (CTL) of \$500,000 or more. Under PITL, "business income" means income from a trade or business (including partnerships and S corporations), rental activities, and a farming business. The carryover period for any amounts in excess of the specified limitation is extended for the number of tax years that the credit was not allowed.

Corporate taxpayers who are members of a combined reporting group may make a one-time, irrevocable assignment of eligible credits, as defined, to an eligible assignee, as defined. Assigned credits can reduce tax for taxable years beginning on or after January 1, 2010.

# THIS BILL

This bill would increase the percentage of qualified research expenses allowed as a component of the R&D credit from the current 15 percent to a maximum of 20 percent by increments of 1.25 percent per year for four years beginning in taxable year 2011.

## IMPLEMENTATION CONSIDERATIONS

The department has identified the following implementation concern. Department staff is available to work with the author's office to resolve this and other concerns that may be identified.

The provision allowing a PIT taxpayer to include the basic research component in their R&D credit references an Internal Revenue Code section that applies only to corporations and is contradictory to existing language. If it is the author's intent to allow basic research payments in the PIT R&D credit, amendments are necessary,

# **TECHNICAL CONSIDERATIONS**

This bill failed to add an end date for the existing qualified research expense component of the R&D credit resulting in both the existing percentage and the specified increased percentage being applicable for years beginning on or after January 1, 2011. Assuming it is the author's intent for only the increased percentage, as phased in, to apply, Amendments 1 & 2 are provided.

## **LEGISLATIVE HISTORY**

SB 444 (Ashburn, 2009/2010) would increase the credit for qualified research expenses to 20 percent and conform to the federal AIC percentages for taxable years beginning on or after January 1, 2009. The increased rate of 20 percent would be the same as this bill; however, this bill would phase in the percentage increase over a four-year period and is silent as to the AIC, as modified.

AB 751 (Leiu, et al., 2007/2008) would have raised the credit for increasing qualified research expenses from 15 percent to 20 percent and conformed to the federal AIC rates for taxable years beginning on or after January 1, 2007. AB 751 failed to pass out of the first house by the constitutional deadline.

SB 928 (Harman, 2007/2008) would have, among other things, raised the credit for increasing qualified research expenses from 15 percent to 20 percent and conformed to the federal AIC rates for taxable years beginning on or after January 1, 2007. SB 928 failed to pass out of the first house by the constitutional deadline.

SB 359 (Runner, 2007/2008) would have, among other things, increased the Qualified Research Expense Credit from 15 percent to 16 percent and conformed to the federal AIC. SB 359 failed to pass out of the first house by the constitutional deadline.

AB 2032 (Lieu, 2005/2006) would have increased the amount of the Qualified Research Expense Credit from 15 percent to 18 percent. AB 2032 failed to pass out of the Assembly Revenue & Taxation Committee.

AB 2567 (Arambula, 2005/2006) would have conformed the amount of the Qualified Research Expense Credit to the amount allowed at the federal level. AB 2567 failed to pass out of the Assembly Revenue and Taxation Committee.

AB 483 (Harman, 2001/2002) and SB 1165 (Brulte, 2001/2002) would have increased the credit for qualified research expenses from 15 percent to 20 percent. AB 483 was held in the Senate Revenue and Taxation Committee. SB 1165 failed to pass out of the originating house by the constitutional deadline.

AB 511 (Stats. 2000, Ch. 107) increased the state credit for qualified research expense from 12 percent to 15 percent.

## **PROGRAM BACKGROUND**

The department annually releases a report on state tax expenditures. The 2008 State Tax Expenditure Report contains information regarding the usage of the Research Expense Credit. The relevant section is attached as Appendix A. The entire report can be viewed by accessing: <a href="http://www.ftb.ca.gov/aboutftb/taxExp08.pdf">http://www.ftb.ca.gov/aboutftb/taxExp08.pdf</a>.

# **OTHER STATES' INFORMATION**

The states surveyed include *Florida, Illinois, Massachusetts, Michigan, Minnesota, and New York.* These states were selected due to their similarities to California's economy, business entity types, and tax laws.

Florida allows corporate taxpayers to claim a corporate income tax credit for tax years beginning on or after January 1, 2007, for certain "eligible costs" for renewable energy technologies investment. Florida lacks a comparable credit for personal income taxpayers because Florida has no state personal income tax.

Illinois' corporate and individual taxpayers may claim an income tax credit for qualified expenditures that are used for increasing research activities in *Illinois*. The credit is equal to 6 ½ percent of the qualifying expenditures.

Massachusetts allows corporate taxpayers to claim an excise tax credit for qualified expenditures that are used for increasing research activities in Massachusetts. The credit is 15 percent of the basic research payments and 10 percent of qualified research expenses conducted in Massachusetts. Effective for taxable years beginning on or after January 1, 2009, and before January 1, 2018, a certified life sciences company is allowed the credit on expenditures for research activity that takes place both within and outside of Massachusetts.

Minnesota allows two credits for research and development: a general nonrefundable credit available to all businesses and a refundable credit allowed to a qualified business for increasing research activities in a biotechnology and health sciences zone. The credit is equal to 5 percent for qualified research expenses up to \$2 million. The amount of the credit is reduced to 2.5 percent for expenses exceeding the first \$2 million.

Michigan allows corporate taxpayers a credit of 1.9 percent of the expenses of the research and development activities conducted in Michigan, and a credit of 3.9 percent of the compensation for services performed in hybrid technology research and development. For taxable years 2009 and 2010 *Michigan* allows corporate taxpayers a credit of 30 percent of the qualified contributions to a qualified research and development business, not to exceed \$300,000. *Michigan* does not allow a credit for pharmaceutical research.

Beginning in 2005, *New York* allows a credit for qualified emerging technology companies. The credit is equal to 18 percent of the cost of research and development property, 9 percent of the qualified research expenses, and the cost of qualified high-technology training expenditures, limited to \$4,000 per employee per year. The credit is limited to \$250,000 per taxable year. Any excess credit can be refunded or applied as a payment for the following taxable year.

#### FISCAL IMPACT

This bill would not significantly impact the department's costs.

#### **ECONOMIC IMPACT**

## Revenue Estimate

The revenue loss from this bill would be as follows:

Estimated Revenue Impact of AB 765 Effective for tax years BOA 1/1/2009								
Enacted by 6/1/2009 (\$ in Millions)								
	2009-10	2010-11	2011-12	2012-13				
Increased % of qualified research expenses allowed for R&D credit	-\$0	-\$3.8	-\$16	-\$31				

This analysis does not consider the possible changes in employment, personal income, or gross state product that could result from this bill.

# **Revenue Discussion**

The above revenue impact was estimated as follows. First, the revenue loss due to the increased percentage, 20 percent versus the existing 15 percent, of qualified research allowed for the regular R&D credit was estimated using a corporate microsimulation model based on the 2006 FTB credit samples. For each corporation in the sample, the tax liabilities under the current and proposed laws were simulated based on the corporation's taxable income, net operating losses, qualified R&D expenses, the current and proposed R&D credit rates, the stock of available credits, and various enacted tax laws that would affect credit usage. A portion of the additional research credit generated in a particular year would be used in that year. Taxpayers without sufficient tax liability would be unable to fully use the additional credit. Unused credit would be carried forward to subsequent years. Unused corporate R&D credit is currently approximately \$10 billion. For example, simulation results indicate that if the regular R&D credit rate were increased to 20 percent for the 2006 tax year, approximately \$700 million of additional research credit would be generated; however, approximately \$50 million of this amount could be used to reduce tax liability.

This \$50 million for the 2006 taxable year was extrapolated to be \$52 million for the 2011 taxable year. The extrapolation was based on the latest Department of Finance forecast of California corporate tax liability. The PIT revenue impact was calculated as a fraction of the corporate impact and is assumed to be equal to the ratio of PIT R&D credits to corporate R&D credits in 2006, approximately 6 percent. The approximate PIT revenue impact is approximately \$3 million (\$52 million x  $6\% \approx $3$  million). Because the rate change would be phased in over a four-year period, the estimated revenue loss would be reduced to approximately \$14 million in the 2011 tax year [(\$52 million + \$3 million) x  $\frac{1}{4} \approx $14$  million].

The 2011 taxable-year impact was then extrapolated to later taxable years in a similar manner. Because the maximum 20 percent credit rate would not be reached until 2014, the full impact of this bill would be reached by 2014 and later taxable years.

Finally, the total revenue impact on a taxable-year basis was fiscalized to derive the results shown in the table above. Approximately 27 percent of the above \$14 million falls into the 2010-11 fiscal year. The revenue impact for the 2010-11 fiscal year is approximately \$3.8 million ( $$14 \text{ million } \times 27\% \approx $3.8 \text{ million}$ ).

# **Arguments/Policy Concerns**

This bill would continue to allow the AIC, as modified. Recent federal law<sup>2</sup> terminated the AIC at the federal level for taxable years beginning after December 31, 2008. The federal change creates additional differences between federal and California tax law, thereby increasing the complexity of California tax return preparation. If it is the author's intent to increase conformity with federal law, the author may wish to amend this bill to substitute the ASC for the AIC.

Conforming to federal tax law is generally desirable because it is less confusing for the taxpayer. With conformity, the taxpayer is required to know only one set of rules

Conformity also eases the burden of the FTB to administer the law by utilizing many federal forms, instructions, and regulations. In addition, whenever possible, the department uses federal information and audit results to verify that taxpayers pay the proper amount of tax. This eliminates the need for the taxpayer to submit the same information to both the IRS and the department.

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<sup>&</sup>lt;sup>2</sup> lbid.

# Appendix A

The California R&D credit is a credit that normally is taken in conjunction with the Federal Research Credit. The calculation of the amount of research expenses creditable in California generally conforms to the calculation for federal purposes, with the exception that the California credit only applies to research activities conducted in California.

For tax year 2006, the most recent data available, the amount of R&D credits applied was \$69 million for PIT and \$1.2 billion under the Corporate Tax. The R&D credit was applied on 3,269 PIT returns and 2,037 corporate tax returns filed for tax year 2006.

At the federal level, there are two reasons to encourage R&D. The first is that, without extra incentives, industry will typically do less R&D work than would be optimal for society. This is because R&D activity often produces "positive externalities;" i.e. benefits to people other than the person doing the R&D. The federal R&D credit reduces the after-tax cost of R&D investments, which should lead to an increase in R&D activity. Since state R&D credits also reduce the after-tax cost of R&D, they too will induce an increase in the overall level of R&D spending. The second purpose of the federal R&D credit is to encourage taxpayers to do their R&D in the United States, rather than in another country.

Since the structure of the California R&D credit generally conforms to that of the federal credit, the California credit will produce both of these same effects. It will contribute to an overall increase in R&D activity, and it will encourage R&D activity to be undertaken in California rather than elsewhere. Because California's contribution to total R&D spending is smaller than the federal government's contribution, the first effect – global increases in R&D activity -- is somewhat less important to state policy than to federal policy. The second effect -- regional competition -- is a relatively more important motivator for state policy. This is because it may be easier for some R&D firms to move their activity to another state than it would be for them to move it to another country, and many states besides California offer R&D credit. Therefore, a California credit may be necessary for the state to remain competitive with these other states in attracting and maintaining research business activity.

Both effects of the California R&D credit, the increase in the overall amount of R&D activity, and the increase in the proportion of this activity that takes place in California, must be considered in evaluating the success of the California R&D credit. The desirability of the increase in overall R&D activity is dependent on the level of the federal R&D credit (and credits offered by other states and countries). If the federal credit is too low, the added R&D incentives provided by states collectively could generate productive additional R&D activity. Alternatively, if the federal credit has already induced optimal levels of R&D, any increases in overall R&D spending induced by additional state credits will be inefficient and hurt overall economic performance. It is not known whether the federal R&D credit is currently set at the optimal level.

The R&D credit may be viewed as successfully maintaining the competitiveness of the California R&D industry only if R&D activity is undertaken in California that would not have been undertaken here in the absence of the credit. The amount of R&D activity that would not have taken place in California in the absence of the credit is unknown. Credits granted for R&D that would have occurred even in the absence of the credit may be considered a windfall.

There are two possible benefits to attracting the R&D business to California. The first is the addition of the R&D jobs themselves. If this were the only benefit, the R&D industry should be singled out for this special benefit only if jobs in this industry are substantially more desirable than jobs in other industries in the state. The second potential benefit from bringing R&D to California is that other California businesses may be able to adopt innovations developed locally more rapidly than they can adopt innovations developed elsewhere. If this is the case, many California businesses, not just those receiving this credit, will gain an advantage over their rivals in other states. This advantage is not a result of being able to obtain technological information more quickly. Given the global communications network, information can be transported across continents relatively quickly and without cost. The advantage to California may come through something economists call *economies of agglomeration*. *Economies of agglomeration* are defined as "a reduction in production costs that results when firms in the same or related industries locate near one another."

Thus, for example, if the R&D credit encourages some pharmaceutical companies to locate their research facilities in an area of California, that will, likewise, encourage the growth of pharmaceutical research support firms (such as material suppliers, pharmaceutical manufacturers, universities doing biological and chemical research, chemical engineers) to be attracted to that area. Subsequently, with the growth of the support industries, other pharmaceutical firms will be attracted to the area. There are clearly many agglomeration economies within California (high-technology in Silicon Valley and motion pictures in Hollywood are two obvious examples). However, many factors contribute to the development and growth of agglomeration economies. Because of the complexity of agglomeration economies, the extent to which the California R&D credit has actually encouraged the development or growth of any agglomeration economies is not known.

We also note that less than one-fourth of this credit is actually available to reduce tax in the year that it is generated. The inability to use the credit (because of a lack of tax to reduce) undoubtedly reduces the incentive provided by the existence of the credit.

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# FRANCHISE TAX BOARD'S PROPOSED AMENDMENTS TO AB 765 As Introduced

### AMENDMENT 1

On page 2 between lines 19 and 20, insert: and before January 1, 2011,

#### AMENDMENT 2

On page 5 between lines 11 and 12, insert: and before January 1, 2011,